



Docket No.: 8733.897.00-US  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Mi-Sook NAM et al.

Confirmation No.: 6500

Application No.: 10/665,436

Group Art Unit: 2871

Filed: September 22, 2003

Examiner: Michael H. Caley

For: TRANSFLECTIVE LIQUID CRYSTAL  
DISPLAY DEVICE AND FABRICATING  
METHOD THEREOF

Customer No.: 30827

**REQUEST FOR RECONSIDERATION**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In response to the Office Action, mailed April 5, 2005, wherein pending claims 1-24 have been rejected, Applicants respectfully request favorable reconsideration in view of the remarks presented herein below.

On page 2 of the Office Action ("Action"), the Examiner rejects claims 1-3 and 8-10 under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent Application Publication No. 2002/0003596 to Kim ("Kim"). Applicants respectfully traverse this rejection.

In order to support a rejection under 35 U.S.C. §102, the cited reference must teach each and every claimed element. In the present case, claims 1-3 and 8-10 are not anticipated by Kim because Kim fails to disclose each and every claimed element as discussed below.

Independent claim 1 defines a color filter substrate for a transfective liquid crystal display device. The substrate includes, *inter alia*, a black matrix on the substrate, and a buffer layer on the black matrix, the buffer layer having a groove corresponding to the black matrix.

Likewise, independent claim 8 defines a method of fabricating a color filter substrate for a transfective liquid crystal display device. The method includes, *inter alia*, forming a black matrix on a substrate, and forming a buffer layer on the black matrix, the buffer layer having a groove corresponding to the black matrix.

In rejecting claims 1 and 8, the Examiner asserts, pointing to element 190 of FIGs. 8, 9C, 9F and 10, that Kim discloses a buffer layer on the black matrix as claimed, in as much as the buffer layer of Kim has open portions between the black matrix portions. This assertion is unfounded for the following reason.

As shown for example in FIG. 8C, the claimed groove corresponding to the black matrix layer is over (or above) the black matrix, not between the black matrix portions as disclosed in Kim. Nowhere in Kim is there any disclosure of the buffer layer having a groove *corresponding* to the black matrix as claimed. Accordingly, independent claims 1 and 8 are patentably distinguishable over Kim.

Claims 2, 3, 9, and 10 variously depend from independent claims 1 and 8. Therefore, claims 2, 3, 9 and 10 are patentably distinguishable over Kim for at least those reasons presented above with respect to claims 1 and 8. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-3 and 8-10 under 35 U.S.C. §102(b).

On page 3 of the Action, the Examiner rejects claims 4, 5, 11, and 12 under 35 U.S.C. §103(a) as allegedly being unpatentable over Kim in view of U.S. Patent Application Publication No. 2003/0179327 to Nonaka et al. ("Nonaka"). Applicants respectfully traverse this rejection.

Claims 4, 5, 11, and 12 variously depend from independent claims 1 and 8. Therefore, claims 4, 5, 11, and 12 are patentably distinguishable over Kim for at least those reasons presented above with respect to claims 1 and 8. In addition, Nonaka discloses a method for

fabricating a color filter for a transflective liquid crystal display device. However, Nonaka fails to overcome the deficiencies of Kim.

Since Kim and Nonaka both fail to disclose or suggest “a buffer layer on a black matrix, the buffer layer having a groove corresponding to the black matrix” as claimed, the combination of these two references cannot possibly disclose or suggest said element. Therefore, even if one skilled in the art were motivated to combine Kim and Nonaka, which Applicants do not concede, the combination would still fail to render claims 4, 5, 11 and 12 unpatentable because the combination fails to disclose each and every claimed element. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 4, 5, 11 and 12 under 35 U.S.C. §103(a).

On page 4 of the Action, the Examiner rejects claims 15-17 and 20-22 under 35 U.S.C. §103(a) as allegedly being unpatentable over Kim. Applicants respectfully traverse this rejection.

In order to support a rejection under 35 U.S.C. §103(a), the Examiner must establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, three criteria must be met. First, there must be some motivation to modify the cited reference. Second, there must be a reasonable expectation of success. Finally, the combination must teach each and every claimed element. In the present case, claims 15-17 and 20-22 are not rendered unpatentable over Kim for at least the reason that Kim fails to disclose or suggest each and every claimed element as discussed below.

Independent claim 15 defines a transflective liquid crystal display device that includes, *inter alia*, a black matrix on an inner surface of a second substrate, and a buffer layer on the black matrix, the buffer layer having a groove corresponding to the black matrix. In addition,

independent claim 20 defines a method of fabricating a transflective liquid crystal display device that includes, *inter alia*, forming a black matrix on a second substrate, and forming a buffer layer on the black matrix, the buffer layer having a groove corresponding to the black matrix.

Independent claims 15 and 20 are patentably distinguishable over Kim for at least the reason that Kim fails to disclose or suggest a buffer layer having a groove corresponding to the black matrix as claimed. (See discussion above respect to claims 1 and 8). Claims 16, 17, 21, and 22 variously depend from independent claims 15 and 20. Therefore, claims 16, 17, 21, and 22 are patentably distinguishable over Kim for at least those reasons presented above with respect to claims 15 and 20. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 15-17 and 20-22 under 35 U.S.C. §103(a).

On page 5 of the Action, the Examiner rejects claims 6, 7, 13, 14, 18, 19, 23, and 24 under 35 U.S.C. §103(a) as allegedly being unpatentable over Kim in view of U.S. Patent Application Publication No. 2003/0160918 to Rho. Applicants respectfully traverse this rejection.

Claims 6, 7, 13, 14, 18, 19, 23, and 24 variously depend from independent claims 1, 8, 15 and 20. Therefore, claims 6, 7, 13, 14, 18, 19, 23, and 24 are patentably distinguishable over Kim for at least those reasons presented above with respect to claims 1, 8, 15, and 20. In addition, Rho discloses a transflective liquid crystal display device and method of manufacturing same. However, Rho fails to overcome the deficiencies of Kim.

Since Kim and Rho both fail to disclose or suggest a buffer layer on a black matrix, the buffer layer having a groove corresponding to the black matrix as claimed, the combination of these two references cannot possibly disclose or suggest said element. Therefore, even if one skilled in the art were motivated to combine Kim and Rho, which Applicants do not concede, the

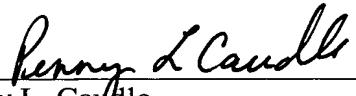
combination would still fail to render claims 6, 7, 13, 14, 18, 19, 23 and 24 unpatentable because the combination fails to disclose a buffer layer with a groove as claimed. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 6, 7, 13, 14, 18, 19, 23 and 24 under 35 U.S.C. §103(a).

The application is in condition for allowance. Notice of same is earnestly solicited. Should the Examiner deem that a telephone conference would further the prosecution of this application, the Examiner is invited to call the undersigned attorney at (202) 496-7548.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. § 1.136, and any additional fees required under 37 C.F.R. § 1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911.

Dated: August 3, 2005

Respectfully submitted,

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